

Serial No. 09/654,501
Docket No. T36-124990M/RS
NGB.185

2

AMENDMENTS TO THE CLAIMS:

Please cancel claim 107 without prejudice or disclaimer:

1-88. (Canceled)

89. (Previously Presented) A light-emitting apparatus, comprising:

a first light source comprising a first semiconductor light-emitting element that emits a blue light;

a second light source comprising:

a first fluorescent material that absorbs said blue light emitted by said first light source and emits a green light; and

a fluorescent material resin, said first fluorescent material being dispersed within said fluorescent material resin; and

a third light source comprising a second semiconductor light-emitting element that emits a red light,

wherein said second light source surrounds outer peripheries of said first light source and said third light source, and said blue light emitted by said first light source, said green light emitted by said second light source, and said red light emitted by said third light source are mixed to thereby generate white light.

90. (Previously Presented) A light-emitting apparatus according to claim 89, wherein

said first fluorescent material comprises at least one of ZnS:Cu, Au, Al; ZnS:Cu, Al;

ZnS:Cu; ZnS:Eu; and Y₂O₂S:Ce.

Serial No. 09/654,501
Docket No. T36-124990M/RS
NGB.185

3

91. (Previously Presented) A light-emitting apparatus according to claim 89, wherein

a concentration of said first fluorescent material continuously changes within said fluorescent material resin, as a function of distance to said first semiconductor light-emitting element and said second semiconductor light-emitting element.

92. (Previously Presented) A light-emitting apparatus according to claim 89, further comprising a lead frame comprising a cup portion having a bottom surface, on which said first light source and said third light source are mounted.

93-98. (Canceled)

99. (Previously Presented) A light-emitting apparatus according to claim 89, wherein the light-emitting apparatus comprises a chip-type LED.

100. (Previously Presented) A light-emitting apparatus according to claim 89, wherein said first fluorescent material comprises at least one of ZnS:Eu and Y₂O₂S:Ce.

101. (Previously Presented) A light-emitting apparatus according to claim 89, wherein said third light source comprises a second fluorescent material that absorbs said blue light emitted by said first light source and emits said red light.

Serial No. 09/654,501
Docket No. T36-124990M/RS
NGB.185

4

102. (Previously Presented) A light-emitting apparatus according to claim 101, wherein said first fluorescent material and said second fluorescent material are dispersed in said fluorescent material resin.

103. (Previously Presented) A light-emitting apparatus according to claim 102, wherein a portion of said blue light emitted by said first light source is transmitted through said fluorescent material resin, and

wherein another portion of said blue light emitted by said first light source is absorbed by said first fluorescent material, which emits said green light, and said second fluorescent material, which emits said red light, and said blue light emitted by said first light source, said green light emitted by said first fluorescent material and said red light emitted by said second fluorescent material are mixed, to thereby generate a mixed light, emitted from said light-emitting apparatus, different in luminescent color from said blue light emitted from said first light source.

104. (Previously Presented) A light-emitting apparatus according to claim 89, wherein said first light source comprises a multiple quantum well structure.

105. (Previously Presented) A light-emitting apparatus according to claim 104, wherein said multiple quantum well structure comprises well layers comprised of InGaN.

Serial No. 09/654,501

5

Docket No. T36-124990M/RS

NGB.185

106. (Previously Presented) A light-emitting apparatus according to claim 89, further comprising a sealing member that focuses light emitted from said light-emitting apparatus.

107. (Canceled)

108. (Previously Presented) A light-emitting apparatus, comprising:

at least two semiconductor light emitting elements having different emitting wavelengths from each other; and

a fluorescent material surrounding outer peripheries of said light emitting elements,

wherein light emitted from said semiconductor light emitting elements and a converted light by said fluorescent material are mixed to thereby generate white light.

109. (Previously Presented) A light-emitting apparatus, comprising:

a semiconductor light-emitting portion having different emitting wavelengths from each other; and

a fluorescent material surrounding outer peripheries of said semiconductor light-emitting portion,

wherein light emitted from said semiconductor light-emitting portion and a converted light by said fluorescent material are mixed to thereby generate white light.